

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington D.C. 20554

In the Matter of)
)
Amendment of Parts 22 and 90 of the)
Commission's Rules to Relocate Certain 150 MHz) RM 11311
Public Safety Mobile Radio Frequencies to the)
Public Safety Radio Services)

To: The Commission

COMMENTS ON THE PETITION BY ICOM AMERICA

The Northern California Chapter of the Associated Public/Safety
Communications Officials,

Inc. hereby respectfully offers the following comments in general support of the
Petition.

BACKGROUND

APCO with over 15,000 public safety members around the world is the largest
such

organization and is recognized by the FCC as the Frequency Coordinator for the
Police and other Services. The Northern California Chapter of this organization
has over 380 members and is designated by APCO as the Frequency Advisory
body for Northern California.

Northern California as recognized by APCO consists of more than 50% of the
area of the State of California with the southern boundary passing directly from
the Pacific Ocean to the eastern border of the State of California, comprising 48
of the state's 58 counties. It is bounded on the west side by the Pacific Ocean on
the east side by the State of Nevada and on the north side by the State of Oregon.

There are two major population areas, the San Francisco Bay area and the Sacramento area. The majority of the remaining area is rural in nature and is dominated by mountainous terrain. Elevations rise from below sea level to over 14,000 feet. Counties are generally large in size ranging from 1000 to over 5000 square miles. Many of the mountainous areas are remote with little or no direct access and it is difficult to identify high level sites that are required to provide adequate radio coverage. This problem is exacerbated by environmental concerns such as designated Wilderness Areas where no installations are permitted.

REQUIREMENT FOR VHF HIGH BAND SPECTRUM

The considerations listed above virtually mandate the use of a few high elevation sites, rather than multiple low level sites, to cover the large political jurisdictions. The propagation characteristics of the VHF High Band spectrum is ideal for this purpose. Since much of the described area is covered with trees and foliage, penetration is necessary and when frequencies are increased, the losses increase accordingly.

The low band spectrum has proven to be undesirable for many reasons such as high noise level, length of antennas required and other technical factors, such as unsuitable for portable equipment. In fact, many manufacturers have ceased to provide such equipment and those systems still operating are desperately attempting to acquire VHF High Band frequencies.

In many of the mountainous areas the propagation characteristics of UHF, and particularly

in the 800 MHz band, require multiple sites. As stated above, sites may not be available in

these areas, and if available would be extremely costly in any event.

AVAILABILITY OF VHF HIGH BAND CHANNELS

Virtually all available spectrum in VHF High Band is saturated. Channel width had

already been reduced to 15 kHz many years ago. Little improvement is seen when

attempting to reduce the channels to 7.5 kHz even though such equipment is now available

and many agencies are replacing their equipment as soon as finances permit.

A further problem is that the Rules have never adopted uniform channel spacing in this

Band and systems have grown in a haphazard fashion often determined by the

requirement to be compatible with equipment operating on the same sites. The

mobile relay mode of operation has found to be the most effective method by far,

and subsequently virtually all new spectrum has uniform spacing for this

purpose. Consequently great care must presently be exercised to prevent using

the same frequency at one site as the receiving frequency and the same frequency

at another high level site as the transmit frequency. These factors all reduce the

effective use of the existing spectrum. Although there have been a few attempts

to develop uniform spacing the magnitude of the problem and the limited

availability of spectrum has made this impossible.

SUITABILITY OF THE PART 22 SPECTRUM

The eighteen paired frequencies and the four unpaired frequencies should be allocated to

the Public Safety Services. They are not only paired in a uniform manner with excellent

separation, but are also wide enough to separate into a two for one manner. They would offer

immediate relief in many areas, and would facilitate the conversion to narrow band. Further,

they could provide the incentive and the potential for initiating a re-banding effort to develop

uniform pairs in some or all of the current VHF High Band spectrum.

As noted in the Icom filing there has been limited response to Auctions 40 and 48, even

though the channels were offered at an extremely low price. NAPCO believes this was due

to lack of knowledge by governmental entities of the process. It was also due in large part

to the realization that this portion of the spectrum has little value to the Industrial Service

In Northern California there were at least three successful bidders. In two instances these

channels have been transferred to public safety agencies for a significant cost. The third

bidder will use these in a county to develop a wide area trunked system to replace their existing conventional system.

NAPCO does not intend this filing to suggest any changes in those channels that have been

procured by others, as many are now providing an excellent result for public safety users.

The only change that could be made would be to facilitate the licensing by Public Safety in

event the Commission acts favorably on this petition.

CONCLUSION

The Northern California Chapter of APCO strongly urges the Commission to act in a

favorable manner on this request and to not only transfer this spectrum to the Public Safety

Service, but to propose a plan for use that would provide the best possible benefit to those

public safety agencies that have a requirement for wide area system coverage.

It should be noted that a majority of the fire agencies in Northern California and

elsewhere rely heavily on the VHF High Band for both day to day use and for

interoperability. California has also developed an excellent interoperability capability

by licensing certain VHF High Band channels for the specific use of interoperability.

Many thousand units are licensed in this fashion under a Plan administered by the State.

The four non-paired channels referred to in this filing would be of tremendous value to

all public safety services if assigned for interoperability in a manner adopted in the State of

California for this purpose.

Respectfully submitted ,

Steve Overacker, President Northern California Chapter APCO